

SAYS DIVINING ROD THEORY IS 'ALL ROT'

Scientific Men Insist There Is No Virtue in a Forked Twig.

PSYCHOLOGIST HAS HOPES

Columbia Professor Thinks Instinct May Lead Some Persons to Water.

It was evident yesterday that it would be hard to gather together in this country a congress of scientific men—geologists, meteorologists or physicists—to inquire soberly into the efficacy of the divining rod in finding water or minerals, as is being done by a German scientific society in Halle, Germany, news of which was printed in THE SUN yesterday morning.

Engineers and men of science who were approached on the subject of their familiarity with the dowsing, as the man who works the rod is called, with one exception said: "The dowsing is a fraud."

"It is all rot," said Prof. Daniel W. Hering, professor of physics of New York University, yesterday. "I don't think any competent scientist in this country even has taken the divining rod seriously or attempted to experiment with it themselves. I know I haven't and although I have seen it tested several times I never have seen an attempt to locate water by it result in success."

"Most of the belief in the divining rod in this country seems to be in California, and most of those persons who have asked me to witness their tests have come from the Pacific coast. Just why I have never been able to decide, unless it is that California is very prolific in all sorts of ideas."

Mining engineers have no faith in the divining rod either.

George C. Stone, treasurer of the American Institute of Mining Engineers, said it never works.

"I have heard of mining engineers who have tried it, although I never have seen an experiment myself," said Mr. Stone. "and I am sure no mining man believes in the rod."

The one voice in support of the dowsing yesterday was from Robert S. Woodworth, professor of psychology in Columbia University, who thinks that the subject of divining rods lies in his department and who offered a theory in defense of the dowsing.

"I can explain the action of the divining rod only as being due to auto-suggestion," said Prof. Woodworth. "I have heard several cases of finding water by means of the rod that seemed to be due to more than mere chance. I never have seen a rod in action, but I have been told by friends of several successful experiments."

It May Be an Instinct.

"It is possible that some persons possess an instinct which would suggest to them when on ground under which is water that such would be a good place for them to dig for it. Or it may be that they can distinguish almost without realizing it signs of water on the ground that would be noticed by an average person, and that these signs would so operate on their mind as to cause them to turn the stick downward, without being conscious of the motive emanating from themselves."

"At least there seem to be cases of real divining too well substantiated to appear as mere accidents."

But Prof. Woodworth of the Columbia School of Mines expresses his contempt for the dowsing in describing him as a charlatan.

"There is no virtue in the rod," he says. "It is an old superstition that came from central Europe two or three centuries ago. I have heard mining engineers discuss it, but in a way that shows they do not believe in it. I am sure no mining man takes it seriously."

As Prof. Peck says, the superstition of the efficacy of the divining rod in finding water or minerals dates back centuries to the days of the ancient Egyptians. Hartz Mountains in Germany felt their way with the forked twig over the places where they supposed ore was to be found.

The rod was described by Prof. Peck as being "in the shape of a Y, which was taken hold of by the two ends and held horizontally in front of the dowsing, with the tail of the Y pointing outward. Holding the twig in this way the dowsing walks over the ground where minerals or water is being sought until on stepping on a spot that lies more or less vertically over the sought mineral or water the tail of the Y is supposed to be depressed, the force depressing it said to be so great that sometimes the twig snaps in the hands."

As to the tree from which the twig may be cut there is the widest diversity of opinion. Most use willow or hazel, but Charles Latimer, an American civil engineer, who wrote a monograph on the subject which he read in 1875 before the Civil Engineers Club of the Northwest in Chicago, said he had used peach, apple, willow, dogwood, beech and maple twigs and had heard of an old barrel hoop being used with success. Mr. Latimer believed in the rod.

In his monograph Latimer mentions that when chief engineer of the Lake Shore Railroad he was once called to a town called Coloma, where a station was being built. He said he found water with ease with the aid of a rod. He said also of an employee on Horace Greeley's farm at Chappaqua who found water with a rod for Greeley. The farmhand's rod twined downward while he was walking over a rock. Powder blew the rock apart and forth gushed a spring.

A Professor Upholds the Rod.

Prof. W. S. Barrett, the chief modern investigator of the divining rod, made an exhaustive study of the subject for the Society for Psychical Research in London. Prof. Barrett says he entered on the study in a sceptical frame of mind, but when his researches were ended, he concluded that the efficacy of the divining rod could not be doubted when handled by persons in whom the gift to locate water exists.

He has written: "Making a liberal allowance for failures of which I have not heard, I have no hesitation in saying that where the dowsing exists and the discovery of underground water sufficient for a domestic supply is a matter of the utmost difficulty the chances of success with a good dowsing far exceed mere lucky hits or the success obtained by the most skillful observer, even with full knowledge of the local geology."

which he was searching and resulting in a nervous twitching down of the twig.

Prof. Barrett laid the dowsing's success to "unconscious clairvoyance" and the direct cause of the turning to some unexplained. Both agreed that few possessed the divining power.

SAYS ROD WIELDER KNOWS.

Yale Professor Declares Psychology Plays Part in Divining.

NEW HAVEN, Sept. 21.—Prof. Roswell P. Angier, head of the department of psychology at Yale and acting director of the psychological laboratory, in reply to a question as to his opinion of the efficacy of the divining rod in locating water said that he could only give an opinion from the point of view of the psychologist. He added:

"So far as psychology has anything to do with the alleged power of the divining rod to locate hidden sources of water and minerals it is somewhat similar to the relation of psychology to certain types of mind reading. When an object is hidden in a room and another person is brought in and holds the hands of a person knowing the location of the object this first person is often able to find the object because he is led in the direction unconsciously by the second person. This is called muscle reading. That is, slight muscular movements are transmitted to the person in ignorance of the location of the object and unconsciously or subconsciously to both the correct direction is indicated."

"Now it is a fact that these subconscious bases of judgment often produce involuntary muscular movements as in the case of muscle reading. This is probably the case with the divining rod so far as it has any reliability at all. That is to say, a person who has good judgment in locating a water supply by natural appearances may find that even without any intention the divining rod held in his hand dips when he comes to a likely spot."

"It is not anything in the rod itself that indicates the water, but the involuntary movement of the man in response to his still unconscious 'feel' that this is the place. That is, one's muscles often involuntarily indicate a judgment before the judgment itself has actually entered clear consciousness."

SUIT SHOWS AMOUNT RUSSELL SAGE LEFT

Continued from First Page.

his charge of \$170,000 for legal expenses was reasonable because the services had been extensive and involved a complete investigation of the Sage family tree because of a bequest in the decedent's will leaving \$25,000 to each heir at law. As a result of the investigation twenty-eight nephews, nieces, grandnieces and grandnephews each got \$25,000.

The total amount paid to Margaret Olivia Sage, the widow, was \$62,500,000, on which a tax of \$625,000 was paid. A tax of \$1,250 was paid on each of the \$25,000 bequests.

Big Individual Holdings.

The individual holdings of Mr. Sage are also listed in the report and since there has been little change in the investments since Mr. Sage's death the list shows to a great extent the securities now held by the Sage estate. Among the largest bond holdings were the following: St. Louis, Iron Mountain and Southern, \$2,366,117; Texas and Pacific, \$942,480; Galveston, Houston and Henderson, \$210,000; St. Louis Southwestern, \$356,662; Missouri Pacific, \$1,527,799 and \$1,823,350; Wabash debentures, \$1,130,500; Missouri, Kansas and Texas, \$485,565; and Iowa Central, \$555,000; and New York city revenue bonds, \$501,095.

The largest stock holdings were 12,401 Manhattan Railway, \$1,822,347; 1,500 Steel common, \$400,312; 5,000 Steel preferred, \$116,000; 15,285 Missouri Pacific, \$1,290,975; 35,800 Western Union, \$2,257,500; 5,151 Baltimore and Ohio, \$602,696; 7,226 Pennsylvania, \$458,651; 1,440 Union Pacific preferred, \$485,188; 5,347 American Telegraph and Cable, \$489,330; 2,500 Pullman, \$555,000; 4,402 Iowa Central, \$228,504; 9,320 St. Louis, Iron Mountain and Southern common, \$198,350; 13,245 preferred, \$663,250; 625 National Bank of Commerce, \$112,500; 497 Importers and Traders Bank, \$278,320; and 1,000 Mercantile Trust Company, \$525,000.

Mr. Sage owned the Poughkeepsie and Eastern Railroad, the stock and bonds of which were appraised at \$250,000. The valuation of the securities was fixed as of the date of his death. Among the other assets of the estate were a Stock Exchange membership worth \$31,000, cash \$612,619, and an open account of Mrs. Sage, \$56,532.

The stocks and bonds found to be worthless included: \$148,000 State of Georgia gold bonds; \$60,000 State of North Carolina bonds; 3,189 shares Minnesota Central, 350 shares Milwaukee Iron Company, 3,000 shares Sabula and Marion City Construction Company, 751 shares Grinnell and Monticuma Railroad, 562 shares International Railway Improvement Company, 500 shares of the Erie Railroad, 825 shares of the Erie Railroad, 950 shares Chicago Elevated Company and 800 shares of the Trustee's Bank. Mr. Sage had no mining stocks.

Held Valuable Real Estate.

Mr. Sage owned thirty-nine parcels of real estate in Manhattan, the most valuable being the north-east corner of Thirty-fourth Street and Broadway, worth \$260,000. His residence at 632 Fifth Avenue was appraised at \$50,000. He had household goods worth \$1,052 in the Fifth Avenue residence and property worth \$3,000 in his country place at Lawrence, L. I.

Justice Brady dismissed the suit of the State against the safe deposit company to recover \$1,000 monthly on the ground that Mr. Osborne was a joint owner of the safe deposit box the company couldn't have refused to permit Mr. Osborne to remove property from the box after Mr. Osborne's death. Deputy Attorney-General Beyer will argue an appeal from Justice Brady's decision before the Appellate Division next month.

WILL STUDY WESTERN LAWS.

Commission to Get Data on Workmen's Compensation Acts.

The commission, which was appointed by the National Civic Federation to study the operation of workmen's compensation laws and to obtain data from which a new model law for uniform State legislation might be drafted by the Workmen's Compensation Department has decided to extend its investigations to Washington, Oregon and California.

Particular interest is manifested in the Washington investigation, as there is in that State the only compulsory law for insurance compensation to workmen. In Ohio and California, where compulsory laws have also been enacted, they are not yet in effect.

Massachusetts, Michigan, Ohio, Wisconsin and Illinois have just been visited by the commission and conferences were held in those States with industrial accident boards, employers and employees. While the laws in these States are elective, at least a part of the cost of the injury and employees in Massachusetts, Michigan and Wisconsin have decided to come in under the compensation act. The commission finds that litigation involving compensation has consequently ceased to exist.

DRESS MANUFACTURERS SUED.

Tip Top Waist and Dress Company Charges Conspiracy.

The Tip Top Waist and Dress Company of 133 West Twenty-first street has brought suit in the Supreme Court for \$50,000 damages against the Dress and

Waist Manufacturers Association and the members of its executive committee. The company complains that the association has injured its business through conspiracy with the International Ladies Dress Garment Workers Union to control the dress and waist making industry. Isidor Reilly, president of the Tip Top Waist and Dress Company, alleges that

the defendants were instrumental in bringing about the general strike of garment workers last January and forcing the manufacturers to unionize their shops and become members of the Dress and Waist Manufacturers Association.

Mr. Reilly charges that the defendants have from time to time "extorted" extraordinary amounts of money from the Tip Top company as a condition for permitting it to carry on its business "unmolested by strikes, boycotts and other interference on the part of the union."

Charles Dushkind of 5 Beekman street is attorney for Mr. Reilly and the Tip Top company.

Rockefeller, III., Changes Name.

WASHINGTON, Sept. 21.—Bowling to the will of 700 enemies of special privileges in Rockefeller, Lake county, the Post Office Department today wiped Rockefeller off the map and made it Arca, Ill. Senator Lewis presented the petition several weeks ago.



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